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Section 3, Remarks:**REMARKS**

Reexamination and reconsideration of this application is respectfully requested in view of the above Amendments to the Claims and the following Remarks.

20 claims remain in this case. No new claims have been added and none canceled. Claims 6 and 17 have been amended herewith, the amendments consisting of minor grammatical changes to make the claims more readable. Claim 6 was amended to correctly number the third step of the claim a part (c) instead of (d), and claim 17 was amended to correct its dependency from claim 16 instead of claim 1.

No new matter has been added by the amendments to the claims.

RESPONSE TO THE REJECTIONS OF THE CLAIMS**The 101 Rejection:**

Claims 1-20 in this case have been rejected within the meaning of 35 USC 101 as non-statutory subject matter. The rejection is merely a broad brush refusal that fails to distinguish the several different types of claims: method, computer program and Internet-based business method. The claims do not stand or fall together, and failure to distinguish between them is a failure of the obligation of full examination.

Applicant submits that Claims 1-20 are in fact patentable subject matter within the meaning of 35 USC 101, and that in particular that these claims comply with the guideline for computer-related inventions of MPEP Sec. 2106.

Practical application:

The inventions of the rejected claims do indeed accomplish a practical application, namely the topological linking method, the computer program and the Internet-based business method provide method steps, program elements and business architecture which provide that a contractor's or subcontractor's contract documents identify the links to his work by virtue of the topological subdivisions defined in the drawing and linked to the relevant contracts that relate to each specific contractor's or subcontractors area of work responsibility. The subcontractor or contractor simply clicks on the links and the assigned area of work responsibility, the defined topological subdivision of each drawing relating to that subcontractor pops up. Those features clearly and self-evidently accomplish a practical application. The Examiner is challenged to state specifically why that is not

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an application that is practical in the architectural and construction fields.

The steps and elements of the inventive methods, programs and systems which cause the linking of topological subdivision regions with contracts and subcontracts do not result in an arbitrary association of data. The Office does not appear to have carefully reviewed the disclosure herein to appreciate the practical significance of the inventive steps and elements, and their distinctiveness over the prior art, as may be seen from discussion of the 35 USC 102(e) rejections below. Indeed, to assert "no practical application" is an unwarranted disrespect of the substantial step forward in the art, and is reflective of lack of real life experience in actual construction project problems.

As described in the specification herein, Claims 1-20 are directed to an elegant and practical solution to a long-standing problem which has caused frustration, delays, cost-overruns, and inaccurately executed construction plans for many years. Indeed, failure to fully account for all elements in a construction project can lead to injury to persons and catastrophic failure of structures. The inventions of the claims, among other things, provide an interactive, computerized system and method for controlling the construction bidding and contract process to provide fully certain and complete description of the scope of work required under each contract and subcontract so as to avoid inconsistencies, omissions, ambiguities and mistakes in the interpretation of plans and specifications. In addition, the inventions provide for the ongoing management of the financing, and the subsequent construction management phases of a project.

Among other things, the methods, programs and systems of Claims 1-20 provide, for example, in the digital memory of a computer, a plurality of bounded subdivision definitions, which are aligned and oriented to the surface of the plans. The working architect, engineer, owner or other responsible professional may thereby define a representational "surface" upon which the detail nature of the work to be performed in a particular trade or category is precisely topologically defined. The inventions further provide linkage of the defining topological subdivisions to digitally stored contracts and subcontracts. By means of this linkage, the scope of work to be bid under the contract is accurately associated or "mapped" to corresponding subdivision regions and overlay categories on the architectural drawings or construction plans.

In other words, the subdivisions superimposed upon the plans provide a work scope definition which is incorporated by reference in the contract documents to define a specific contract

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obligation so as to permit full, clear and unambiguous definition of the scope of work to be bid under each contract and subcontract. By this means, the architects, contractors, sub-contractors, owners and lenders may ascertain and agree on precisely what is required in each sub-contract. The inventions of Claims 1-20 permit the early detection and correction of errors, omissions, ambiguities or inconsistencies of the plans, thus providing a bi-directional flow of information to increase the accuracy both the contracts and the plans. Errors, omissions, ambiguities, inconsistencies, or misinterpretation of the plans and specifications, as well as resulting subcontract disputes and change orders, quite simply are extremely expensive and time consuming to resolve. By avoiding or expeditiously correcting these, the methods, programs and systems of Claims 1-20 can substantially reduce the costs and time of construction, and improve the resulting quality.

Improving accuracy, saving money, improving safety and simplifying operations are all obviously accomplishment of practical applications. To say otherwise reflects adversely on the Office.

Useful, concrete and tangible result:

The inventions of Claims 1-20 produce a "useful, concrete and tangible result" within the meaning of the holding in State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. As stated in MPEP Sec. 2106, the purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research, Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993). As discussed above, the inventions of Claims 1-20 provide a valuable and versatile tool for the working architect, engineer, or other responsible professional who is faced with the challenge of conducting the construction bidding process quickly, accurately and economically.

Patentable methods, programs and systems may include mathematical algorithms:

The mere fact that the claims include the use of mathematical algorithms or the digital manipulation of data does not thereby render them unpatentable, where the claims provide a useful, concrete, tangible result.

For example, claims drawn to a long-distance telephone billing process containing mathematical algorithms were held to be patentable subject matter because "the claimed process

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applies the Boolean principle to produce a useful, concrete, tangible result without pre-empting other uses of the mathematical principle." AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1358, 50 USPQ2d 1447, 1452 (Fed. Cir. 1999). In another example, "[T]ransformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' -- a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601.

Thus here, to the extent a mathematical algorithm may be employed to assist in defining the many trade-related topological subdivisions of the many plan sheets, it is but one element in achievement of an obviously useful, concrete and tangible result, namely the linked contract and plan subdivisions ordered by subcontractor area of responsibility. The instant inventions clearly meet the State Street test.

The claims must be evaluated in light of the full disclosure:

The office must assess the patentability of Claims 1-20 in the light of a full and thoughtful reading of the entire disclosure to determine its practical application and its useful, concrete and tangible results. The meaning of the terms of the claims must be determined by reliance on the applicant's disclosure, Markman v. Westview Instruments, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (en banc), aff'd, U.S. , 116 S. Ct. 1384 (1996). Furthermore, claims must be given their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

A claim must be evaluated in light of all the limitations:

The claims must be evaluated for patentability in light of every limitation in the claim. The Office may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered.

"In determining the eligibility of respondents' claimed process for patent protection under 101, their claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.

This is particularly true in a process claim because a new combination of steps in a process

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may be patentable even though all the constituents of the combination were well known and in common use before the combination was made." Diamond v. Diehr, 450 U.S. at 188-89, 209 USPQ at 9

Clearly, in assessing the practical application, and useful, concrete, tangible result of a claim, the Office is required to treat each of Claims 1-20 as a whole, in light of all its limitations, steps and elements, not just focusing on a specific digital process step or computer-related element. As discussed above, the claims 1-20, each treated in its entirety and read in light of the specification herein, provide a practical application, and produce useful, concrete, tangible results.

Based on the forgoing analysis, Applicant submits the rejections of Claims 1-20 are unsound under 35 USC 101 and that the rejection should be withdrawn.

THE ART REJECTIONS UNDER SECTIONS 102 AND 103

Applicant will discuss the references in detail below, showing that Krause is irrelevant to the claimed method, the program and the business method. In addition, in sections relating to the case law, Applicant will show that the Examiner has not discharged his legal duty of providing factual support for the rejections independent of the teachings in Applicant's specification.

The 102 Rejection:

Claims 1-10, 12, 14, 17-18 in this case have been rejected under 35 USC 102(e) over Krause 5,950,206. Applicant believes that Krause does not anticipate any of the rejected claims within the meaning of 35 USC 102(e).

Applicant believes the disclosure of Krause has been misapplied to the claims of the present case. Most importantly, the disclosure of Krause does not, either in Krause's disclosure of his inventive subject or in Krause's discussion of prior art, in any way references the topological subdivision of construction plans in any manner for any purpose.

The Second Office Action appears to treat this categorical omission of Krause of topological subdivision as completely trivial throughout. However, *in nearly every rejected claim* of the present application there are method steps or elements of a combination based squarely upon the definition and subsequent useful application of such topological subdivision regions of the plans. This distinction of the claims of the present Application over Krause is not trivial, but rather is central and material.

In particular, in support of the rejections, the Second Office Action identifies portions of the

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disclosure of Krause which purportedly anticipate the subject matter of correspondingly identified portions of the pending claims.

However, it is absolutely transparent that the Office Action has not analyzed the claims with sufficient care to discern the inventive nature of the claimed method (or for that matter the program or Internet-based business method). Indeed, it is clear that the Office Action merely dismisses the claimed method as some sort of use of a computer with respect to some aspect of construction. In short, the Examiner deems the invention taught within the meaning of 35 US Code §102 or suggested within the meaning of 35 US Code §103 by any reference that discloses a database in relation to a set of construction plans. This broad brush approach to rejections is improper under the applicable Court decisions, as noted below.

In order to demonstrate the irrelevance of Krause to the pending claims, Applicant will first discuss the Office Action's cross-referenced portions of Krause and the pending claims in the order addressed in the Second Office Action.

Independent Claim 1:

The Second Office Action identifies as anticipating the substance of step (a) of Claim 1: Krause, Col. 1, lines 14-34 (hereafter referenced as *Krause Part A*); and Krause, Col. 2, line 2 to Col. 3, line 35 (hereafter referenced as *Krause Part B*)

Step (a) of Claim 1 is as follows:

(a) defining a plurality of topological subdivision regions of said at least one plan sheet, each of said plurality of subdivision regions characterizing a selected portion of the scope of work defined by said plans;

It is clear from reading *Krause Part A* and *Krause Part B* that neither portion describes or implies any act of "defining a plurality of topological subdivision regions" on one or more plan sheets. *Krause Part A* appears to describe only that building plans may be drafted using either manual means or CAD systems, and that the general practice is to distribute building plans in microfiche form to potential bidders. *Krause Part B* appears to describe three prior art patents which reference using computers to store images and design data and to link "hot spots" on a primary document to a secondary document. There is no reference to or implication of defining or otherwise using any "topological subdivision regions" of any plan sheet. *Krause Part B* contains the entire "Summary of the Invention" section of Krause, which describes certain apparatus

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elements and method steps that Krause considered to be his invention. None of these apparatus elements and method steps of Krause contain any reference to or implication of defining or otherwise using any "topological subdivision regions" of any plan sheet. In fact, Krause defines an invention grounded simply on key-word searching of TEXT DATA only, and in no way addresses the use of any GRAPHIC DATA whatever relating to construction plans, contracts, specifications or anything else.

The Second Office Action identifies *Krause Part B* as anticipating the substance of step (b) of Claim 1:

Step (b) of Claim 1 is as follows:

(b) linking each of said plurality of subdivision regions to one of a plurality of said contracts; and

It is clear from reading *Krause Part B* that this portion neither describes nor implies any linking of plan subdivision regions to contracts. This portion of Krause appears to describe a purported prior art reference to linking "hot spots" on a primary document to a secondary document, but in no way describes linking a defined subdivision region of plans to any other document.

With respect to Krause's characterized invention, *Krause Part B* appears to include generally the following activities (paraphrased herein for brevity and clarity):

- Maintaining a record of modifications to a database of electronically-stored documents and a history of the dates of such modifications;
- Maintaining a record of a specific user's document-access history;
- Performing a user-selected keyword search of text data in the document;
- Filtering the search results using the recorded history data so as to display only keyword-identified documents that have been modified since the users most recent access date; and
- Marking a document found in the keyword search for subsequent tracking.

Thus, Krause is simply a system for recording database key-word searches in the form of lists of documents responding to the key words used in the searches. There is no mention in *Krause Part B* of linking any portion of a document to any other document or document portion, much less of linking a defined subdivision region of a plan to a contract or anything else.

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The Second Office Action identifies *Krause Part A* and *Krause Part B* as anticipating the substance of step (c) of Claim 1:

Step (c) of Claim 1 is as follows:

(c) incorporating said linked region into said contract to define a portion of the scope of work to be performed under said contract.

It is clear from reading *Krause Part A* and *Krause Part B* that neither portion describes or implies any act of "incorporating said linked region into said contract to define a portion of the scope of work". As described above, Krause does not describe defining or linking any subdivision region of the plans to anything for any purpose, much less as an operative term of a contract.

Based on the forgoing analysis, Applicant submits the rejection of Claim 1 is unsound and that the rejection should be withdrawn.

Dependent Claim 2:

The Second Office Action identifies *Krause Part A* and *Krause Part B*, and also *Krause Fig. 3* as anticipating the substance of Claim 2. Claim 2 is directed to the specific sub-steps of the topological subdivision defining step (a) of main Claim 1.

Keeping in mind that Krause fails to teach or suggest topological subdivision, steps (a) and (b) of Claim 2 recite the defining step as including inputting and storing plans as data in a computer, and steps (c) and (d) of Claim 2 recite inputting and storing in a computer additional data which defines subdivision regions of the plans that characterize portions of the project work. As described above, neither of *Krause Part A* and *Krause Part B* describe such activity.

Krause Fig. 3 is a flowchart showing various method steps related to the characterized invention of Krause. The flowchart steps shown in *Krause Fig. 3* include steps related to keyword searching of text data, tracking user access, and displaying, marking and printing documents. The elements of *Krause Fig. 3* are discussed in Krause's "Description Of The Preferred Embodiment" at Col. 4, line 66 to Col. 5, line 64. There are no steps in *Krause Fig. 3* or the corresponding description relating in any way to inputting and storing in a computer additional data which defines subdivision regions of the plans characterizing portions of the project work.

Based on the forgoing analysis, Applicant submits the rejection of Claim 2 is unsound and that the rejection should be withdrawn.

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Dependent Claim 3:

The Second Office Action identifies *Krause Part B*, and quotes Krause, Col. 1, lines 23-32 (hereafter referenced as *Krause Part C*) as anticipating the substance of Claim 3:

In most areas, for bidding purposes, a single company distributes rolls of microfiche of the blueprint drawings or building plans in their entirety to interested contractors and subcontractors. Selected ones of the drawings on the microfiche are then viewed to provide information to estimate construction costs and prepare bid proposals on the work to be done. Though a contractor may be interested in only one particular portion of the building, that contractor must search through all of the plans in order locate the drawings of interest.

Steps (a) and (b) of Claim 3 are as follows:

(a) the step of providing in said computer-readable memory a table defining a plurality of project subcontract work categories, each of said work categories corresponding to the work to be performed under one of said plurality of subcontracts; and

(b) the step of linking in said computer-readable memory said at least one subdivision region with a selected one of said work categories, so as to create a data structure correlating said at least one subdivision region with said selected work category. (*bolding added*)

The quoted portion of Col. 1 of Krause appears to describe only the distribution of microfiche of the drawings to potential bidders. Neither this quote nor *Krause Part B* that this portion neither describes nor implies any linking of plan subdivision regions to contracts.

Furthermore, as stated above herein, there is no mention in *Krause Part B* of linking any portion of a document to any other document or document portion, and certainly there is no mention in Krause of any linking so as to create a data structure in computer-readable memory correlating any plan subdivision region with any work category defined in any table in computer-readable memory.

In the inventive method, the subcontractor does not have to look through all the reams of drawings; the subcontractors' contract documents identify the links to his work by virtue of the topological subdivisions defined in the drawing and identified in the contracts that relate to each specific contractor's or subcontractors area of work responsibility. The subcontractor or contractor simply clicks on the links and the assigned area of work responsibility, the defined topological

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subdivision of each drawing relating to that subcontractor pops up.

This is totally unlike Krause, in which the contractors and subcontractors are left, as usual, to review each and every drawing for relevant areas of responsibility, which in a large project is a search for needles in a huge haystack. As Krause notes, the standard practice is that each "contractor must search through all of the plans in order locate the drawings of interest". What Krause does is make a record of the electronic searches through key-word searched documents and tags those that surface in response to the key-words. Krause does not indicate how drawings are key-word searched in his system, if at all. Krause still distributes microfiche copies of the drawings, but no parts are defined or topologically linked to anything.

Based on the forgoing analysis, Applicant submits the rejection of Claim 3 is unsound and that the rejection should be withdrawn.

Dependent Claim 4:

The Second Office Action identifies *Krause Part B* and *Krause Part C* as anticipating the substance of Claim 4.

Step (a) of Claim 4 relates generally providing in said computer-readable memory at least one subcontract document file.

Step (b) of Claim 4 is as follows:

(b) a step of linking in said computer-readable memory at least said selected work category, thereby including in said data structure a correlation between said selected work category and said subcontract document file, and thereby **including in said data structure a correlation between said at least one plan sheet subdivision region and said subcontract document file, so as to characterize a selected portion of said project work to be performed under said subcontract. (bolding added)**

As stated above herein (see particularly, the comments in regards to claim 3), neither *Krause Part B* nor *Krause Part C* describes or implies any linking of any plan subdivision region to any contracts or subcontract. Based on the forgoing analysis, Applicant submits the rejection of Claim 4 is unsound and that the rejection should be withdrawn.

Dependent Claim 5:

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The Second Office Action identifies *Krause Fig. 1* and *Krause Fig. 3* as anticipating the substance of Claim 5.

Step (d) of Claim 5 is as follows:

(d) a step of displaying an image of said subdivision region super-imposed upon said plan sheet in response to a selection of said icon using said graphic user interface, so as to characterize at least a portion of the work to be performed under said subcontract by plan information included in said subdivision and plan sheet images. (*bolding added*)

The substance of *Krause Fig. 3* and its corresponding description is discussed herein above. *Krause Fig. 1* merely appears to show a perspective view of a computer apparatus, and is described further in Krause's "Description Of The Preferred Embodiment" at Col. 3, line 64 to Col. 4, line 34. It is clear that neither *Krause Fig. 1* nor *Krause Fig. 3* show or imply any superimposition of an image of a topologically defined subdivision region on a displayed image of a plan sheet.

Based on the forgoing analysis, Applicant submits the rejection of Claim 5 is unsound and that the rejection should be withdrawn.

Dependent Claim 6:

The Second Office Action identifies *Krause Fig. 1* and *Krause Fig. 3* as anticipating the substance of Claim 6.

Step (c) as currently amended of Claim 6 is as follows:

(c) ~~(d)~~ a step of printing an image of said indexed subdivision region superimposed upon said plan sheet, so as to characterize at least a portion of the work to be performed under said subcontract by plan information included in said subdivision and plan sheet images. (*bolding added*)

The substance of *Krause Fig. 1* and *Krause Fig. 3* and its corresponding description is discussed herein above. Neither *Krause Fig. 1* nor *Krause Fig. 3* show or imply any printing of image of an of a topologically defined subdivision region superimposed on a plan sheet.

Based on the forgoing analysis, Applicant submits the rejection of Claim 6 is unsound and that the rejection should be withdrawn.

Dependent Claim 7:

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The Second Office Action identifies *Krause Part A* and *Krause Part B* as anticipating the substance of Claim 7.

Step (a) of Claim 7 is as follows:

(a) **defining at least one closed boundary curve coordinated with said plan sheet, said subdivision region comprising the plan area enclosed by said boundary. (bolding added)**

As stated above herein, neither *Krause Part A* nor *Krause Part B* describes or implies any topological subdivision of plan regions, such as by defining at least one closed boundary curve coordinated with said plan sheet. This step is simply not disclosed in Krause.

Based on the forgoing analysis, Applicant submits the rejection of Claim 7 is unsound and that the rejection should be withdrawn.

Dependent Claims 8 and 9:

The Second Office Action identifies *Krause Figs. 1 to 4* as anticipating the substance of Claim 8 and Claim 9.

Step (a) of Claim 8 is as follows:

(a) **defining at least one trace path upon said at least one plan sheet, said trace path delimiting a trace area of said plan sheet lying within a predetermined distance from said path, said subdivision region comprising said trace area. (bolding added)**

Step (a) of Claim 9 is as follows:

(a) **defining at least one center point upon said at least one plan sheet, said center point delimiting an area of said plan sheet lying within a predetermined geometric boundary shape coordinate with said center point., said subdivision region comprising the plan area enclosed by said predetermined boundary shape. (bolding added)**

The substance of *Krause Fig. 1* and *Krause Fig. 3* and its corresponding description is discussed herein above. *Krause Fig. 2* merely appears to show a schematic layout of a data processing system, and is described further in Krause's "Description Of The Preferred Embodiment" at Col. 4, lines 35 to 62. *Krause Fig. 1* appears to show a representation of a "screen

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capture" of a monitor displaying a *text-only* informational document, and is described further in Krause at Col. 5, lines 12 to 15.

There is nothing in *Krause Figs. 1 to 4*, or in the corresponding description nor elsewhere in Krause, which shows or implies any defining of a trace path upon a plan sheet, so as to delimit a trace area of the plan sheet lying within a predetermined distance. Similarly, there is nothing in *Krause Figs. 1 to 4*, or elsewhere, which shows or implies any defining of a point upon a plan sheet, so as to delimit an area lying within a predetermined geometric boundary shape. Since Krause is silent, a §102 rejection is inappropriate.

Based on the forgoing analysis, Applicant submits the rejections of Claim 8 and Claim 9 are unsound and that the rejections should be withdrawn.

Dependent Claim 10:

The Second Office Action identifies *Krause Part A* and *Krause Part B* as anticipating the substance of Claim 10.

Step (b) of Claim 10 is as follows:

(b) selecting one or more contiguous ones of said plurality of sub-areas, said subdivision region comprising said selected contiguous sub-areas.

As stated above herein, neither *Krause Part A* nor *Krause Part B* describes or implies any topological subdivision of plan regions, such as by selecting one or more contiguous sub-areas so that the subdivision region comprises the selected sub-areas. Krause simply does not disclose defining a subdivision region of a plan by any method, and accordingly is clearly irrelevant. Based on the forgoing analysis, Applicant submits the rejection of Claim 10 is unsound and that the rejection should be withdrawn.

Independent Claim 12:

The Second Office Action identifies *Krause Part A* and *Krause Part B* as anticipating the substance of Claim 12.

The elements (a) through (e) of Claim 12 re as follows:

- (a) a computer-readable memory means for storing at least one plan file including digital image information of said plan sheets;
- (b) a computer display means connected to said memory means for displaying said

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plan sheet image;

(c) a computer-operator interface means for inputting information to specify a closed boundary on said plan sheet image to define at least one subdivision region of said plan sheet image, said subdivision region corresponding to a portion of the project work defined by said plans;

(d) a computer processing means connected to said memory means for storing said boundary specifying information; and

(e) linking means connected to said memory means for linking said stored plan image and said stored boundary information to at least one bidding contract, so as to define a portion of the project work to be performed under said contract. (***bolding added***)

As stated above herein, neither *Krause Part A* nor *Krause Part B* describes or implies any topological subdivision of plan regions, and discloses no storage, linking or other use or operations upon boundary specifying information. The data systems of Krause simply do not pertain in any way to subdivision regions of a plan, and as such do not form the basis of a proper §102 rejection. This rejection is tantamount to the Examiner relying on phantom prior art; art simply that does not exist.

Based on the forgoing analysis, Applicant submits the rejection of Claim 12 is unsound and that the rejection should be withdrawn.

Independent Claim 14:

The Second Office Action identifies *Krause Part A* and *Krause Part B* and much the elements of *Krause Fig. 1* and *Krause Fig. 3* and their corresponding description is as anticipating the substance of Claim 14 for computer program product.

The computer readable program code of Claim 14 is set forth as follows:

... said computer readable program code comprising:

(a) a first program code means for causing said computer system to read a file stored in said memory means, said file including an image of at least one of said plan sheets;

(b) a second program code means for causing said computer system to display said plan sheet image;

(c) a third program code means for causing said computer system to input operator-specified information to define a boundary around at least one subdivision

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region of said plan sheet image, said subdivision region corresponding to a portion of the project work defined by said plans;

(d) a fourth program code means for causing said computer system to store said boundary-defining information in said memory means; and

(e) a fifth program code means for causing said computer system to link said stored plan image and said stored boundary information to at least one bidding contract, so as to said define a portion of the project work to be performed under said contract. (*bolding added*)

As stated above herein, neither *Krause Part A*, nor *Krause Part B*, nor in *Krause Figs. 1 to 4*, nor in the corresponding description, nor elsewhere in *Krause*, shows or implies any defining any topological subdivision of plan regions. In no parts of *Krause* does he disclose any storage, linking or other use or operations based on boundary specifying information. The data systems of *Krause* simply do not pertain in any way to subdivision regions of a plan, and thus are not relevant to Claim 14, much less active disclose the program features thereof.

Based on the forgoing analysis, Applicant submits the rejection of Claim 14 is unsound and that the rejection should be withdrawn.

Dependent Claims 17 and 18 (depending from Claim 16):

Claim 17 as filed contained an inadvertent dependency reference to claim 1, although by clear implication Claim 17 was intended to depend from Claim 16 (Claim 17 is a further limitation of a business method as in independent claim 16). The preamble of Claims 17 is amended above to reflect correct dependency.

Since independent Claim 16 has not been subject to a 35 USC 102(e) rejection over *Krause*, it is respectfully submitted that its dependent Claims 17 and 18 should not be thus rejected either. Applicant requests that the rejections of claims 17 and 18 be withdrawn.

In summary, there is simply no way to twist the disclosure of *Krause* to cover the process of creating topological subdivision regions in the plan sheets and linking them to contracts, or to incorporate the linked region in to the contract scope of work definition. Simply, the *Krause* reference is not relevant to the inventive claimed method, system or programs of the rejected claims. The Office is invited to show where *Krause* refers to any "topological subdivisions" of the plan sheets as called for in the instant claims. Clearly the Office has overlooked the reference to

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"topological subdivision regions" in the claims.

The 103 Rejection:

Claims 11, 13, 15, 16, and 19-20 in this case have been rejected under 35 USC 103(a) over Krause 5,950,206 in light of the establishment of the Internet, as described in the article quoted in the Office Action from <http://www.walthowe.com/navnet/history.html>. Applicant believes that These claims are not obvious within the meaning of 35 USC 103(a) over these references, and that the rejections should be withdrawn.

Applicant has shown conclusively above that the disclosure of Krause has been misapplied to the claims of the present case in connection with a §102 rejection. Likewise Krause fails to support the rejections under 35 USC 103(a). As described in detail above, the disclosure of Krause does not, either in Krause's disclosure of his process or in Krause's discussion of prior art, in any way reference topological subdivision of construction plans in any manner for any purpose. There are no suggestions or teaching in Krause to lead one of ordinary skill in the art to define discrete topological regions of the plans as elements to be linked to documents of any kind, nor to store or use such topological regions as set forth in the rejected claims. Krause simply does not touch upon this core substance of the method, system or programs of the rejected claims.

Merely invoking the prior existence of the Internet does not provide any suggestion or teaching in this regard either. Applicant submits that method, system or programs of the rejected claims are novel and non-obvious with respect to the teachings of prior art internet commerce, and that the Examiner has not followed the applicable law.

Dependent Claim 11 (depending from Claim 1):

Claim 11 is as follows:

11. (Previously Amended) A method of subdividing and linking as in claim 1, wherein said **linking and incorporation is performed electronically and is remotely accessible via an Internet web-server**, said plans and said subcontracts being stored in electronic form for rendering and display via said web-server. (*holding added*)

The "linking" denoted in claim 11 finds antecedent basis in step (b) of Claim 1 and the "incorporation" finds antecedent basis in step (c) of Claim 1. Both the linking and incorporation thus depend from the steps of defining, linking and incorporating topological subdivision regions of the plans. Neither feature is found in or suggested by the references. Based on the forgoing

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analysis, Applicant submits the rejection of Claim 11 is unsound and that the rejection should be withdrawn.

Dependent Claim 13 (depending from Claim 12) and Dependent Claim 15 (depending from Claim 14):

Claim 13 is as follows:

13. (Original) A computer data processing system; as in claim 12 which includes a computer program including code for causing said computer system to be accessible by at least one remote user via the Internet.

Claim 15 is as follows:

15. (Original) A computer program product as in claim 14, wherein said product includes a sixth program code means for causing said computer system be accessible by at least one remote user via the Internet, said access of said remote user permitting said user to control the execution of at least one of said first through fifth program code means.

As discussed above with respect to the rejection of Claim 12, the computer data processing system, made accessible via the Internet in claim 13, includes means employing operations upon boundary-specifying information corresponding to a subdivision region of the plans. Likewise, the computer program product, including code providing accessibility via the Internet in claim 15, includes code providing for operations upon boundary specifying information corresponding to a subdivision region of the plans.

Krause does not suggest such operations or coded methods, and reference to the general history of the Internet does not cure the defects in Krause. Based on the forgoing analysis, Applicant submits the rejections of Claim 13 and Claim 15 are unsound and that the rejections should be withdrawn.

Independent Claim 16, and its dependent claims 17-20:

Claim 13 is as follows:

16. (Previously Amended) An electronic business method for construction contract bid and construction management control comprising;

- a) a website, including at least one of design services, **inter-linking of construction project plans for bidding contracts**, builder control, and affiliate links;
- b) a website operation for providing said services to user-subscribers, including input

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of operator-specific information response to user requests and information and communications to users; and

c) a computer data processing system for said interlinking and website operation.

(bolding added)

As discussed above, the cited reference, Krause, does not suggest the linking of construction plans and/or drawings to bidding contracts. Krause addresses the processing and use of text data only, not drawings of any kind. Invoking the existence of the internet does not render the inventive method of Claim 16 obvious over Krause, since Krause contains no suggestion to define links between graphic (plan) data with contract documents. Based on the forgoing analysis, Applicant submits the rejections of Claim 16 and its dependent claims 17-20 are unsound and that the rejections should be withdrawn.

The conclusory, unsupported assertion that the rejected claims would be obvious over the disclosure of Krause in light of the Internet is irrelevant and improper, as shown by the discussion of the pertinent law, below. The Office Action fails to show what elements in Krause could function in light of the Internet to carry out the method steps of Claims 16-20. Thus, the Office Action is relying on opinion. Even enabling Krause via the Internet does not create the claimed method, program or business system. As stated in the Response to the First Office Action, the Office, in making the rejections, ignores the real problem of the topological issues between the construction plan sheets and the contracts that is solved, elegantly so, by the inventive process, system and computer programs. This achievement is not obvious in light of Krause and is a significant step forward in the art that is deserving of a patent.

It is clear that the 103 Rejection totally fails to point to any teachings in any of the references for any suggestion to combine the references. Nor does any purported combination teach or suggest the features claimed. The 103 Rejections are clearly inappropriate and should be withdrawn.

THE LAW APPLICABLE TO THIS CASE

The Examiner's Improper Use of Phantom Prior Art:

Applicant has noted above the lack of pertinence (that is, the irrelevance) of Krause, and that reliance on silence in a reference to assert teachings to support 102 and 103 rejections, without substantiation, is not the law.

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Consider what the law really is: The Court stated in *In re Cofer*, 148 USPQ 268 at 271 (CCPA):

“Necessarily it is facts appearing in the record, rather than prior decisions in and of themselves, which must support the legal conclusion of obviousness under 35 USC 103. Merely stating that a compound or composition is obvious, without adequate factual support, is not sufficient.”

Thus, the reliance by the Examiner on phantom prior art, a mere statement of opinion by the Examiner that the claimed invention is taught or obvious without a shred of factual support is improper.

It amounts to the Examiner deeming the claimed invention is obvious, a reliance on phantom prior art. The Board of Patent Appeals and Interferences does not condone that approach, stating in *Ex parte Stern*, 13 USPQ 2d 1379 at 1381:

“The examiner should be aware that “deeming” does not discharge him from the burden of providing the requisite factual basis and establishing the requisite motivation to support a conclusion of obviousness. [Citing cases] The examiner’s reference to unidentified phantom prior art techniques falls far short of the mark. [Citing cases] Accordingly, the examiner’s rejection of the appealed claims under 35 USC 103 as unpatentable over any of the primary references, considered singly, is reversed.”

Similarly, both the 102 and the 103 rejection here should be withdrawn as lacking any factual basis. Blatantly obvious glossing over what the references in fact disclose amounts to misrepresentation and is not support for the rejections. That does not discharge the Examiner’s burden of presenting factual evidence.

The Examiner Improperly Uses Applicant’s Specification as Prior Art:

In referring to the general development of the Internet, the Examiner is in essence saying that the Internet is a well known tool, and accordingly it could be modified to operate in the manner claimed. In order to make that assertion, the Examiner improperly applies a “could be modified” standard, and finds direction for the modification, not from the teachings of Krause or the development of the Internet, but from Applicant’s own specification. Neither are proper.

The fundamental principle, as articulated by the Court of Appeals for the Federal Circuit in

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In *re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984), is that the prior art must suggest the combination of references. In *Gordon*, the Court rejected the idea that the prior art devices could be modified to produce the claimed device as a proper basis for an obviousness rejection, holding the combination is not proper unless the prior art suggests the desirability of such a modification.

In *SmithKline Diagnostics, Inc. v. Helena Laboratories Corp.*, 8 USPQ2d 1468 (Fed. Cir. 1988), the Court held that to pick and chose elements from references to recreate the invention is not proper. And in *Northern Telecom, Inc. v. Datapoint Corp.*, 15 USPQ2d 1531 (Fed. Cir. 1990), cert. denied, 498 U.S. 920 (1990), the Court held that “[i]t is insufficient that the prior art disclosed the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor.” (Emphasis added).

These governing principles were applied by the Court in holding both of the obviousness rejections in *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990) and *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990) were in error, and reversed the Office. In *re Mills* specifically held that although the prior art device could be modified to run the way the applicant’s device was claimed to run, “there must be a suggestion or motivation in the reference to do so”, 16 USPQ2d at 1430. Since there was none, the rejection was in error and was reversed.

More recently, in *Sensonics, Inc. v. Aerosonic Corp.*, 38 USPQ2d 1551 (Fed. Cir. 1996), the Court reiterated this principle, holding there was no teaching or suggestion in the prior art that would have led a person skilled in the art to select the specific mechanical and electrical structures and concepts and combine them in the manner of the invention of that case.

As a further principle, both the Courts and the Board of Appeal have long held that the suggestion for the combination in the references cannot come from the Applicant’s Specification, see, for example, *Ex parte Brack*, 134 USPQ 445 (POBA 1961). The reason is simple: Applicant’s Specification is not prior art. Applicant’s specification cannot be used as a parts-list to search for disparate parts in the art, and then used as a blueprint to assemble the selected parts. The sources for the motive not only to select the method, the program and the internet business method, but also the direction for reassembling them into the claimed combinations to obtain the claimed results, must come only from the references.

These principles were violated in the Office Action. The rejections are contrary to the

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applicable principles of law governing the Office, and should be withdrawn.


CONCLUSION

It is Applicant's view that this Application is now in complete condition for allowance and favorable action is urged. In the event that there remain open issues, or the Examiner does not concur and withdraw the rejections, the Examiner is requested to contact undersigned counsel for Applicant for a telephone Interview to discuss the issues in order to speed this case to an early issue date.

Respectfully submitted,
Rex J. Crookshanks

Date: August 9, 2004

by:


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Attachment: Statement of Inventor as to Age

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End of Section 3, Remarks.

End of Response to Office Action.